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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte AVISHAI KEREN, MEIR FEDER, and OFIR PAZ

Appeal 2009-011988
Application No. 09/770,767[1]
Technology Center 2400

Before MARC S. HOFF, CARLA M. KRIVAK, and ELENI MANTIS MERCADER, *Administrative Patent Judges*.

HOFF, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from a Final Rejection of claims 94-111 and 128-139. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part.

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[1] The real party in interest is Microsoft Corporation.

Appellants' invention concerns a method of remote computer access. The method comprises, in a server, generating a compressed video stream representing a display for one or more computer programs and receiving continuous user interaction via a remote client that changes one or more elements of the display, at least one of the display elements changed being an "unmodified object." The method further calls for modifying the unmodified object to produce a modified object, wherein the modification is performed independently of the executed computer program so that the modified object will be more efficiently converted to a compressed video stream. The method further comprises generating a compressed video stream by converting at least the modified object into the compressed video stream for rendering at least a portion of the display of the executed computer program at a display device at the client (Spec. 12, 18, 24; claim 94).

Claim 128 is exemplary of the claims on appeal:

> 128. In a server that provides remote client access to one or more computer programs, a method of determining when to generate a compressed video stream representing a display for the one or more computer programs by monitoring changes to the display, the method comprising:
>
> executing a computer program at a server, wherein the execution of the computer program generates display objects from a set of display commands, the display objects are at least a portion of a display for said computer program;
>
> identifying changes of said display which are responsive to at least one type of continuous user interaction command received from a remote client

> determining whether said changes warrant an update to an image based at least in part on one or more of available bandwidth, available computing power, or type of user connection; and
>
> upon determining said changes do warrant an update, processing said changes and converting said display commands into a compressed video stream, wherein said changes are inserted into said compressed video stream at an update frame rate corresponding to a priority assigned to other portions of the display that are unchanged and such that changes to said image are inserted into the compressed video stream at a faster rate than compressed data that does not include changes to said image.

The Examiner relies upon the following prior art in rejecting the claims on appeal:

Bulman	US 5,623,587	Apr. 22, 1997
Huang	US 6,175,663 B1	Jan. 16, 2001
Hsu	US 6,195,692 B1	Feb. 27, 2001 (filed Jun. 02, 1997)
Chen	US 6,278,466 B1	Aug. 21, 2001 (filed Jun. 11, 1998)
Catlow	US 6,445,874 B1	Sep. 03, 2002 (filed Feb. 10, 1998)

Claims 94-99 and 137 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chen in view of Hsu.

Claims 100 and 101 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chen in view of Hsu and Bulman.

Claims 102-111 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chen in view of Hsu, Bulman, and Huang.

Claims 128-136, 138, and 139 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chen in view of Hsu and Catlow.

Throughout this decision, we make reference to the Appeal Brief ("App. Br.," filed April 9, 2007) and the Examiner's Answer ("Ans.," mailed July 31, 2007) for their respective details.

ISSUES

With respect to independent claim 94, Appellants argue that the Examiner admits that Chen fails to disclose continuous user interaction (App. Br. 10) and that neither Chen nor Hsu disclose modifying an unmodified object at the server (where the display elements are generated) (App. Br. 10-11).

With respect to independent claim 128, Appellants restate the arguments made for claim 94. Appellants further argue, *inter alia*, that Catlow fails to teach inserting changes to an image at an update frame rate which is faster than that of data without display changes (App. Br. 13-14).

Appellants' contentions present us with the following issues:

1. Does the combination of Chen and Hsu teach or fairly suggest continuous user interaction?

2. Does the combination of Chen and Hsu teach or fairly suggest modifying an unmodified object at the server?

3. Does the combination of Chen, Hsu, and Catlow teach or fairly suggest inserting image changes into a compressed video stream at an update frame rate that is faster than that of data without image changes?

PRINCIPLES OF LAW

> Section 103(a) forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'

KSR Int'l Co. v. Teleflex, Inc., 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). *See also KSR*, 550 U.S. at 407, ("While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.")

ANALYSIS

CLAIMS 94-111, 132, AND 134-138

We select claim 94 as representative of this group of claims pursuant to our authority under 37 C.F.R. § 41.37(c)(1)(vii).

We are not persuaded by Appellants' arguments, summarized *supra*, that the Examiner erred in rejecting representative claim 94.

Appellants' first argument that, as acknowledged in the final rejection, Chen fails to teach the claimed "continuous user interaction," is not relevant to a determination of Examiner error. The Examiner relies on *Hsu*, rather than Chen, to teach the claimed feature (Ans. 4).

Appellants assert, in support of their second argument, that Chen discloses that "any such modifications [sic] is performed by the server system 16 which is very different from the animation authoring system 12 which generates the display elements" (App. Br. 11). This argument is not germane to the claimed invention, which recites a compressed video stream representing a display at a server. Appellants have not shown how Chen

fails to teach "modifying … [an] unmodified object … independently of said executed computer program," as claim 94 recites.

Last, we find Appellants' argument that "[n]owhere does Chen teach or suggest that the modifying of an unmodified object be performed at the server where the current program (which generates the display objects) executes" (App. Br. 11), to be contradictory in view of Appellants' argument, noted *supra*, that Chen teaches modifications being performed by server system 16 (*id.*).

Accordingly, we conclude that the Examiner did not err in rejecting claim 94 under § 103. We further conclude that the Examiner did not err in rejecting claims 95-111, 132, and 134-138, argued together with claim 94, under § 103. We will sustain the Examiner's rejections.

CLAIMS 128-131, 133, AND 139

We are persuaded by Appellants' argument that Chen in view of Hsu and Catlow does not teach or fairly suggest inserting changes into the compressed video stream at a higher frame rate than compressed data that does not include image changes (App. Br. 13-14). We do not agree with the Examiner's finding that Catlow teaches this feature. We have reviewed Catlow and find no mention of inserting image changes at a higher rate than data that does not include image changes. The Examiner also concludes that a higher frame rate for image changes "would have been obvious" from the teachings of Chen (Ans. 10), but the Examiner provides no evidentiary support for the conclusion.

We therefore conclude that the Examiner erred in rejecting claims 128, as well as claims 129-131, 133, and 139 dependent therefrom, under § 103. We will not sustain the rejection.

CONCLUSION

1. The combination of Chen and Hsu teaches continuous user interaction.

2. The combination of Chen and Hsu teaches modifying an unmodified object at the server.

3. The combination of Chen, Hsu, and Catlow does not teach or fairly suggest inserting image changes into a compressed video stream at an update frame rate that is faster than that of data without image changes.

ORDER

The Examiner's rejection of claims 94-111, 132, and 134-138 is affirmed.

The Examiner's rejection of claims 128-131, 133, and 139 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

peb